

chain nodes :

17

ring nodes :

1 2 3 4 5 6 7 8 9 11 12 13 14 15 16

chain bonds :

7-11

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 11-12 11-16 12-13 13-14 14-15 15-16

exact/norm bonds :

5-7 6-9 7-8 7-11 8-9

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16

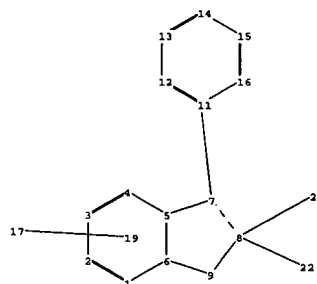
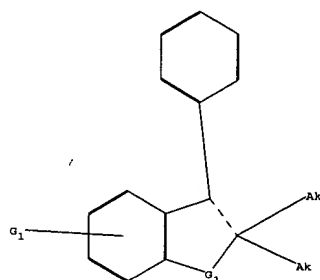
isolated ring systems :

containing 1 : 11 :

G1:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:Atom 12:Atom  
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:CLASS



chain nodes :

17 21 22

ring nodes :

1 2 3 4 5 6 7 8 9 11 12 13 14 15 16

chain bonds :

7-11 8-21 8-22

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 11-12 11-16 12-13 13-14 14-15 15-16

exact/norm bonds :

5-7 6-9 7-8 7-11 8-9 8-21 8-22

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16

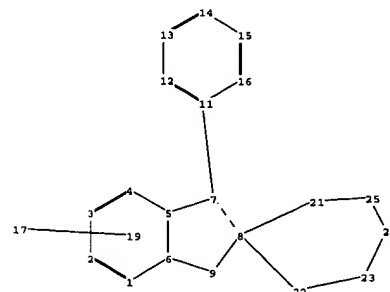
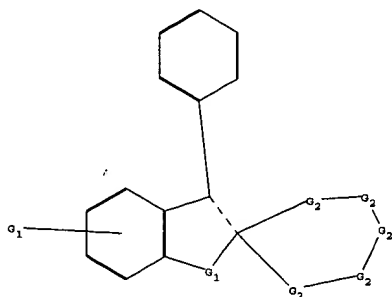
isolated ring systems :

containing 1 : 11 :

G1:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:Atom 12:Atom  
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:CLASS 21:CLASS 22:CLASS



chain nodes :

17

ring nodes :

1 2 3 4 5 6 7 8 9 11 12 13 14 15 16 21 22 23 24 25

chain bonds :

7-11

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 8-21 8-22 11-12 11-16 12-13 13-14  
14-15 15-16 21-25 22-23 23-24 24-25

exact/norm bonds :

5-7 6-9 7-8 7-11 8-9 8-21 8-22 21-25 22-23 23-24 24-25

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16

isolated ring systems :

containing 1 : 11 :

G1:O,S

G2:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:Atom 12:Atom  
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:CLASS 21:Atom 22:Atom 23:Atom 24:Atom  
25:Atom

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

<u>NEWS 1</u>		Web Page URLs for STN Seminar Schedule - N. America
<u>NEWS 2</u>		"Ask CAS" for self-help around the clock
<u>NEWS 3</u>	Feb 24	PCTGEN now available on STN
<u>NEWS 4</u>	Feb 24	TEMA now available on STN
<u>NEWS 5</u>	Feb 26	NTIS now allows simultaneous left and right truncation
<u>NEWS 6</u>	Feb 26	PCTFULL now contains images
<u>NEWS 7</u>	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
<u>NEWS 8</u>	Mar 24	PATDPAFULL now available on STN
<u>NEWS 9</u>	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
<u>NEWS 10</u>	Apr 11	Display formats in DGENE enhanced
<u>NEWS 11</u>	Apr 14	MEDLINE Reload
<u>NEWS 12</u>	Apr 17	Polymer searching in REGISTRY enhanced
<u>NEWS 13</u>	AUG 22	Indexing from 1927 to 1936 added to records in CA/CAPLUS
<u>NEWS 14</u>	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
<u>NEWS 15</u>	Apr 28	RDISCLOSURE now available on STN
<u>NEWS 16</u>	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
<u>NEWS 17</u>	May 15	MEDLINE file segment of TOXCENTER reloaded
<u>NEWS 18</u>	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
<u>NEWS 19</u>	May 19	Simultaneous left and right truncation added to WSCA
<u>NEWS 20</u>	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
<u>NEWS 21</u>	Jun 06	Simultaneous left and right truncation added to CBNB
<u>NEWS 22</u>	Jun 06	PASCAL enhanced with additional data
<u>NEWS 23</u>	Jun 20	2003 edition of the FSTA Thesaurus is now available
<u>NEWS 24</u>	Jun 25	HSDB has been reloaded
<u>NEWS 25</u>	Jul 16	Data from 1960-1976 added to RDISCLOSURE
<u>NEWS 26</u>	Jul 21	Identification of STN records implemented
<u>NEWS 27</u>	Jul 21	Polymer class term count added to REGISTRY
<u>NEWS 28</u>	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
<u>NEWS 29</u>	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
<u>NEWS 30</u>	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
<u>NEWS 31</u>	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
<u>NEWS 32</u>	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
<u>NEWS 33</u>	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
<u>NEWS 34</u>	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
<u>NEWS 35</u>	AUG 18	Data available for download as a PDF in RDISCLOSURE
<u>NEWS 36</u>	AUG 18	Simultaneous left and right truncation added to PASCAL
<u>NEWS 37</u>	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
<u>NEWS 38</u>	AUG 18	Simultaneous left and right truncation added to ANABSTR
<u>NEWS EXPRESS</u>		April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
<u>NEWS HOURS</u>		STN Operating Hours Plus Help Desk Availability
<u>NEWS INTER</u>		General Internet Information
<u>NEWS LOGIN</u>		Welcome Banner and News Items
<u>NEWS PHONE</u>		Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 08:20:33 ON 08 SEP 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:20:40 ON 08 SEP 2003

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STRUCTURE FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9

DICTIONARY FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See [HELP CROSSOVER](#) for details.

Experimental and calculated property data are now available. See [HELP PROPERTIES](#) for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

L1 STRUCTURE UPLOADED

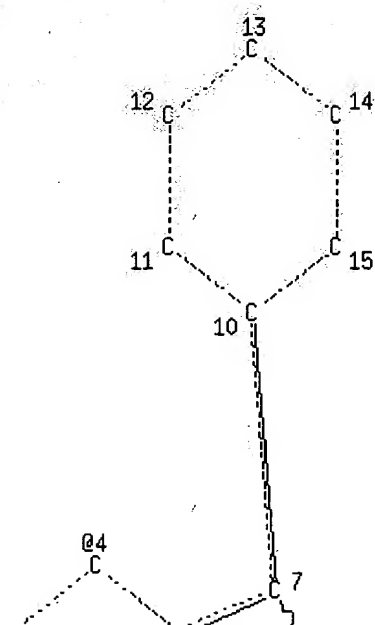
=> d 11

L1 HAS NO ANSWERS

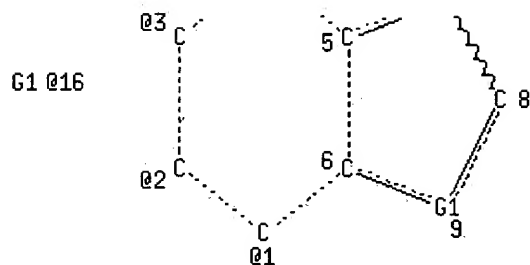
L1 STR

0 17 \$ 18

Page 1-A



Page 1-B



Page 2-B

VAR G1=17/18

VPA 16-1/2/3/4 S

NODE ATTRIBUTES:

NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS R	AT	4
NSPEC	IS R	AT	5
NSPEC	IS R	AT	6
NSPEC	IS R	AT	7
NSPEC	IS R	AT	8
NSPEC	IS R	AT	9
NSPEC	IS R	AT	10
NSPEC	IS R	AT	11
NSPEC	IS R	AT	12
NSPEC	IS R	AT	13
NSPEC	IS R	AT	14
NSPEC	IS R	AT	15
NSPEC	IS C	AT	16

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

=> s 11

SAMPLE SEARCH INITIATED 08:24:11 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1143 TO ITERATE

87.5% PROCESSED 1000 ITERATIONS 50 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 20832 TO 24888  
PROJECTED ANSWERS: 1390 TO 2586

L2 50 SEA SSS SAM L1

=> s 11 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
FULL SEARCH INITIATED 08:24:17 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 23107 TO ITERATE

100.0% PROCESSED 23107 ITERATIONS 2122 ANSWERS  
SEARCH TIME: 00.00.01

L3 2122 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	150.15	150.36

FILE 'HCAPLUS' ENTERED AT 08:24:21 ON 08 SEP 2003  
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FILE COVERS 1907 - 8 Sep 2003 VOL 139 ISS 11  
FILE LAST UPDATED: 7 Sep 2003 (20030907/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 629 L3

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.25	152.61

FILE 'REGISTRY' ENTERED AT 08:24:49 ON 08 SEP 2003  
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STRUCTURE FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9  
DICTIONARY FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

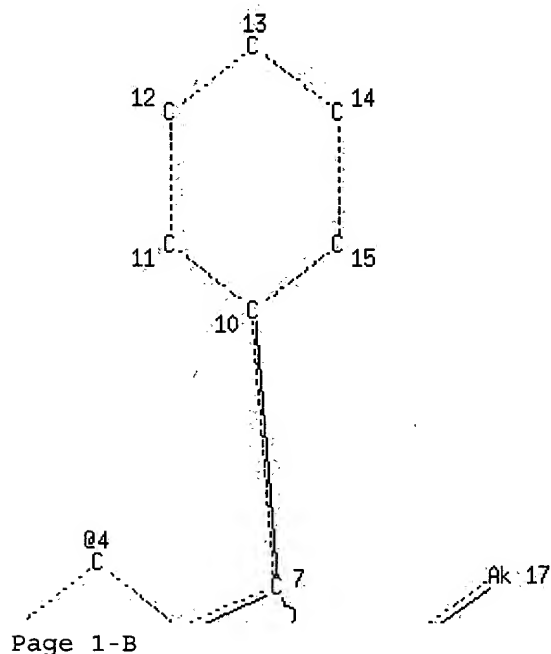
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

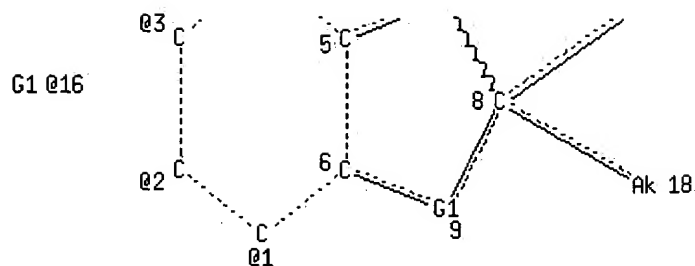
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNnote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
L5 STRUCTURE UPLOADED

=> d 15  
L5 HAS NO ANSWERS  
L5 STR  
0 19 S 20  
Page 1-A







Page 2-B

VAR G1=19/20

VPA 16-1/2/3/4 S

NODE ATTRIBUTES:

NSPEC	IS R	AT	1
NSPEC	IS R	AT	2
NSPEC	IS R	AT	3
NSPEC	IS R	AT	4
NSPEC	IS R	AT	5
NSPEC	IS R	AT	6
NSPEC	IS R	AT	7
NSPEC	IS R	AT	8
NSPEC	IS R	AT	9
NSPEC	IS R	AT	10
NSPEC	IS R	AT	11
NSPEC	IS R	AT	12
NSPEC	IS R	AT	13
NSPEC	IS R	AT	14
NSPEC	IS R	AT	15
NSPEC	IS C	AT	16
NSPEC	IS C	AT	17
NSPEC	IS C	AT	18

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 17 18

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

=> s 15

SAMPLE SEARCH INITIATED 08:25:45 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1143 TO ITERATE

87.5% PROCESSED 1000 ITERATIONS

3 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 20832 TO 24888

PROJECTED ANSWERS: 3 TO 179

L6

3 SEA SSS SAM L5

=> s 15 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 08:25:53 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 23107 TO ITERATE

100.0% PROCESSED 23107 ITERATIONS  
 SEARCH TIME: 00.00.01

96 ANSWERS

L7 96 SEA SSS FUL L5

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

148.55

301.16

FILE 'HCAPLUS' ENTERED AT 08:25:58 ON 08 SEP 2003  
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FILE COVERS 1907 - 8 Sep 2003 VOL 139 ISS 11  
 FILE LAST UPDATED: 7 Sep 2003 (20030907/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17

L8 5 L7

=> s 18 and pd ohkawa, s?/au

0 PD OHKAWA, S?/AU

L9 0 L8 AND PD OHKAWA, S?/AU

=> s 18 and pd < july 1997

18057329 PD < JULY 1997

(PD<19970700)

L10 3 L8 AND PD < JULY 1997

=> d 110, ibib abs fhitr, 1-3

L10 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
-----------	-------------------

ACCESSION NUMBER:

1988:549335 HCAPLUS

DOCUMENT NUMBER:

109:149335

TITLE:

Preparation of 5-hydroxycoumaran derivatives as cardiovascular and antiallergy agents

INVENTOR(S):

Terao, Shinji; Maki, Yoshitaka

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

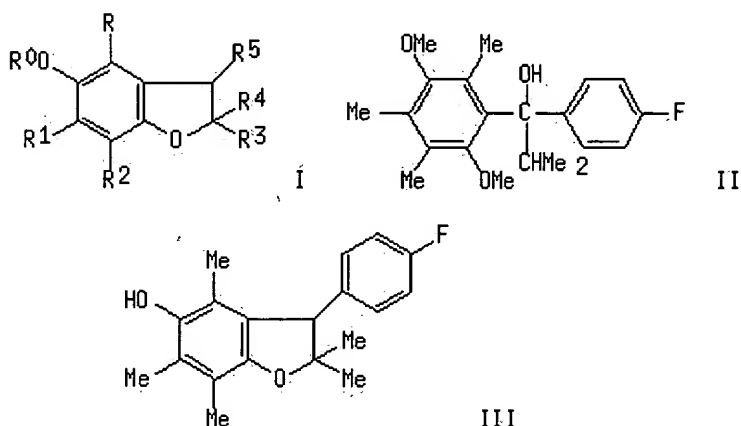
SOURCE: Eur. Pat. Appl., 39 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273647	A1	19880706	EP 1987-311122	19871217 <--
EP 273647	B1	19920311		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 01272578	A2	19891031	JP 1987-310346	19871207 <--
JP 08005871	B4	19960124		
AT 73448	E	19920315	AT 1987-311122	19871217 <--
DK 8706789	A	19880628	DK 1987-6789	19871222 <--
US 4857516	A	19890815	US 1987-136273	19871222 <--
HU 48609	A2	19890628	HU 1987-5988	19871223 <--
HU 206332	B	19921028		
AU 8783040	A1	19880630	AU 1987-83040	19871224 <--
AU 605818	B2	19910124		
CA 1325635	A1	19931228	CA 1987-555354	19871224 <--

## PRIORITY APPLN. INFO.:

JP 1986-313380 19861227  
 JP 1987-235491 19870918  
 EP 1987-311122 19871217

OTHER SOURCE(S): CASREACT 109:149335; MARPAT 109:149335  
 GI



AB The title compds. [I; R = alkyl; R0 = H, acyl; R1-R4 = (un)substituted alkyl; R1R2 = CH:CHCH:CH; R3R4 = polymethylene; R5 = (un)substituted alkyl, aryl, heterocyclyl] were prepd. 4-FC6H4COCHMe2 (prepn. given) was added to 1-bromo-2,5-dimethoxy-3,4,6-trimethylbenzene in THF previously treated with BuLi and the mixt. stirred 1 h to give 92.3% diphenylpropanol II which was refluxed 18 h in 47 wt.% aq. HBr to give 74.8% title compd. III. The latter, at 100 mg/kg orally gave 93% inhibition of the excitatory behavior induced by spinal intrathecal injection of FeCl2 soln. in mice.

## IT 116674-24-9P

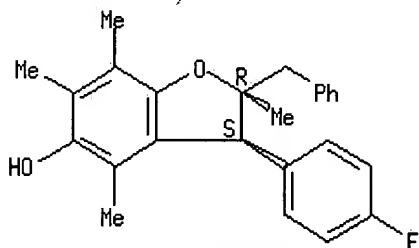
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reaction of, in prepn. of cardiovascular and antiallergic agents)

RN 116674-24-9 HCAPLUS

CN 5-Benzofuranol, 3-(4-fluorophenyl)-2,3-dihydro-2,4,6,7-tetramethyl-2-

(phenylmethyl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L10 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
-----------	-------------------

ACCESSION NUMBER: 1988:112209 HCAPLUS  
 DOCUMENT NUMBER: 108:112209  
 TITLE: A process for the preparation of 2,3-dihydrobenzofuran derivatives from resorcinol derivatives  
 INVENTOR(S): Takahashi, Katsuya; Hashimoto, Isao  
 PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62138487	A2	19870622	JP 1985-279193	19851213 <--
JP 04046273	B4	19920729		

PRIORITY APPLN. INFO.: JP 1985-279193 19851213

GI For diagram(s), see printed CA Issue.

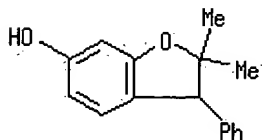
AB The title compds. (I), useful as intermediates for agrochems., pharmaceuticals, and perfumes, are prepd. from 1,3-dihydroxybenzenes (II).

IT 113168-21-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, by cyclocondensation of resorcinol with ketone)

RN 113168-21-1 HCAPLUS

CN 6-Benzofuranol, 2,3-dihydro-2,2-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)



L10 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
-----------	-------------------

ACCESSION NUMBER: 1971:463523 HCAPLUS  
 DOCUMENT NUMBER: 75:63523  
 TITLE: Photolysis of 2-(benzyloxy)-4-(dodecyloxy)benzophenone and 2-isopropoxy-4-methoxybenzophenone  
 AUTHOR(S): Lappin, Gerald R.; Zannucci, J. S.  
 CORPORATE SOURCE: Tennessee Eastman Co. Div., Eastman Kodak Co.,

Kingsport, TN, USA

SOURCE: Journal of Organic Chemistry (1971), 36(13), 1808-11  
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

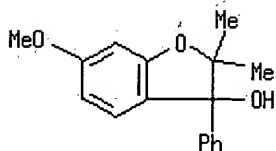
GI For diagram(s), see printed CA Issue.

AB The photolysis of 2-(benzyloxy)-4-(dodecyloxy)benzophenone (I) or of 2-isopropoxy-4-methoxybenzophenone (II) proceeded mainly via ring closure between the carbonyl C and the  $\alpha$  carbon of the 2 substituent to give 6-(dodecyloxy)-2,3-dihydro-2,3-diphenyl-3-benzofuranol (III) or 2,3-dihydro-2,2-dimethyl-6-methoxy-3-phenyl-3-benzofuranol (IV), resp. The quantum efficiencies for disappearance of starting ketone and for cyclization decreased significantly with an increase in solvent polarity. The lifetime of the excited state, believed to be  $3(n, \pi^*)$ , was about 3 8-10  $\mu$  sec, unusually short for a benzophenone. Further photolysis of I or III resulted in dehydration to give 6-(dodecyloxy)-2,3-diphenylbenzofuran (V) and partial cyclization of V to 11-(dodecyloxy)benzo[b]phenanthro[9,10-d]furan, but further photolysis of IV gave only 2-hydroxy-4-methoxybenzophenone. Both I and II gave the corresponding 4-alkoxy-2-hydroxybenzophenone as a minor product.

IT 28856-53-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 28856-53-3 HCAPLUS

CN 3-Benzofuranol, 2,3-dihydro-6-methoxy-2,2-dimethyl-3-phenyl- (8CI) (CA INDEX NAME)



=> file caold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	18.12	319.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

FILE 'CAOLD' ENTERED AT 08:26:59 ON 08 SEP 2003  
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FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d his

(FILE 'HOME' ENTERED AT 08:20:33 ON 08 SEP 2003)

FILE 'REGISTRY' ENTERED AT 08:20:40 ON 08 SEP 2003

L1 STRUCTURE UPLOADED  
L2 50 S L1  
L3 2122 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 08:24:21 ON 08 SEP 2003

L4 629 S L3

FILE 'REGISTRY' ENTERED AT 08:24:49 ON 08 SEP 2003

L5 STRUCTURE UPLOADED  
L6 3 S L5  
L7 96 S L5 FULL

FILE 'HCAPLUS' ENTERED AT 08:25:58 ON 08 SEP 2003

L8 5 S L7  
L9 0 S L8 AND PD OHKAWA, S?/AU  
L10 3 S L8 AND PD < JULY 1997

FILE 'CAOLD' ENTERED AT 08:26:59 ON 08 SEP 2003

=> s 17

L11 0 L7

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.40	319.68
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.95

FILE 'REGISTRY' ENTERED AT 08:27:10 ON 08 SEP 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9  
DICTIONARY FILE UPDATES: 7 SEP 2003 HIGHEST RN 581049-54-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties

in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

L12 STRUCTURE UPLOADED

=> d 112

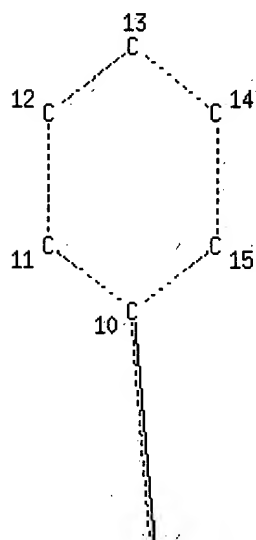
L12 HAS NO ANSWERS

L12 STR

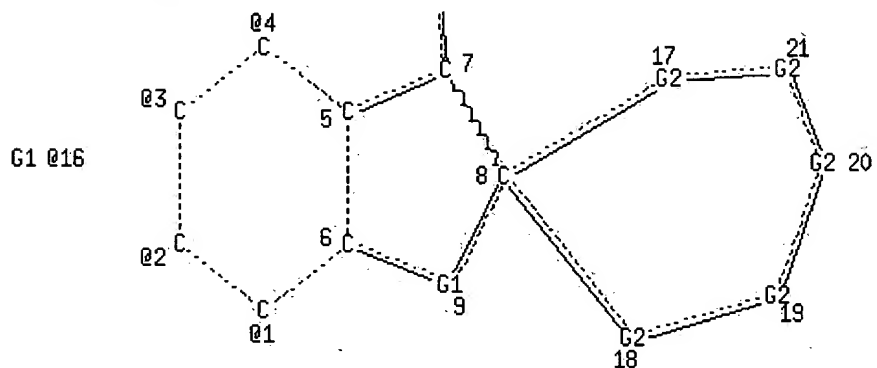
C 24 N 25

0 22 5 23

Page 1-A



Page 1-B



Page 2-B

VAR G1=22/23

VAR G2=24/25

VPA 16-1/2/3/4 S

NODE ATTRIBUTES:

NSPEC	IS	R	AT	1
NSPEC	IS	R	AT	2
NSPEC	IS	R	AT	3
NSPEC	IS	R	AT	4
NSPEC	IS	R	AT	5
NSPEC	IS	R	AT	6
NSPEC	IS	R	AT	7
NSPEC	IS	R	AT	8
NSPEC	IS	R	AT	9

NSPEC IS R AT 10  
 NSPEC IS R AT 11  
 NSPEC IS R AT 12  
 NSPEC IS R AT 13  
 NSPEC IS R AT 14  
 NSPEC IS R AT 15  
 NSPEC IS C AT 16  
 NSPEC IS R AT 17  
 NSPEC IS R AT 18  
 NSPEC IS R AT 19  
 NSPEC IS R AT 20  
 NSPEC IS R AT 21  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

=&gt; s l12

SAMPLE SEARCH INITIATED 08:29:49 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 1143 TO ITERATE

87.5% PROCESSED 1000 ITERATIONS  
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
 SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 20832 TO 24888  
 PROJECTED ANSWERS: 1 TO 86

L13 1 SEA SSS SAM L12

=&gt; s l12 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 08:29:54 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 23107 TO ITERATE

100.0% PROCESSED 23107 ITERATIONS  
 SEARCH TIME: 00.00.01

10 ANSWERS

L14 10 SEA SSS FUL L12

=&gt; file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	149.75	469.43
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.95

FILE 'HCAPLUS' ENTERED AT 08:29:58 ON 08 SEP 2003  
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FILE COVERS 1907 - 8 Sep 2003 VOL 139 ISS 11  
FILE LAST UPDATED: 7 Sep 2003 (20030907/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l14

L15 4 L14

=> s l15 and pd < july 1997

18057329 PD < JULY 1997

(PD<19970700)

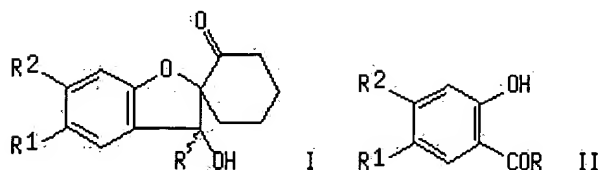
L16 2 L15 AND PD < JULY 1997

=> d l16, ibib abs fhitr, 1-2

L16 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
--------------	----------------------

ACCESSION NUMBER:	1993:670938 HCAPLUS
DOCUMENT NUMBER:	119:270938
TITLE:	An expedient route to spirobenzofurans
AUTHOR(S):	Sumathi, T.; Balasubramanian, K. K.
CORPORATE SOURCE:	Dep. Chem., Indian Inst. Technol., Madras, 600 036, India
SOURCE:	Tetrahedron Letters (1993), 34(24), 3915-8
	CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 119:270938
GI	



AB The synthesis of spirobenzofurans I (R = H, Me, Ph; R1 = H, Cl, Me, OMe; R2 = H, OMe) via base-mediated spiroannulation of arom. aldehydes and ketones II with 2-chlorocyclohexanone is reported.

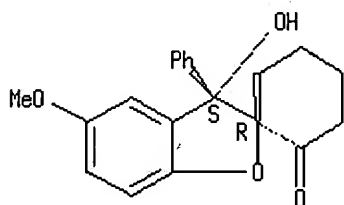
IT 151424-49-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 151424-49-6 HCAPLUS

CN Spiro[benzofuran-2(3H),1'-cyclohexan]-2'-one, 3-hydroxy-5-methoxy-3-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

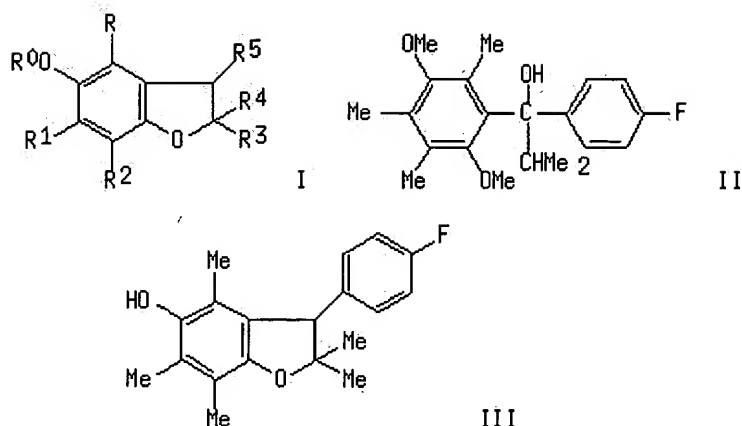


L16 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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ACCESSION NUMBER: 1988:549335 HCAPLUS  
 DOCUMENT NUMBER: 109:149335  
 TITLE: Preparation of 5-hydroxycoumaran derivatives as cardiovascular and antiallergy agents  
 INVENTOR(S): Terao, Shinji; Maki, Yoshitaka  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 39 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273647	A1	19880706	EP 1987-311122	19871217 <--
EP 273647	B1	19920311		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 01272578	A2	19891031	JP 1987-310346	19871207 <--
JP 08005871	B4	19960124		
AT 73448	E	19920315	AT 1987-311122	19871217 <--
DK 8706789	A	19880628	DK 1987-6789	19871222 <--
US 4857516	A	19890815	US 1987-136273	19871222 <--
HU 48609	A2	19890628	HU 1987-5988	19871223 <--
HU 206332	B	19921028		
AU 8783040	A1	19880630	AU 1987-83040	19871224 <--
AU 605818	B2	19910124		
CA 1325635	A1	19931228	CA 1987-555354	19871224 <--
PRIORITY APPLN. INFO.:			JP 1986-313380	19861227
			JP 1987-235491	19870918
			EP 1987-311122	19871217
OTHER SOURCE(S):		CASREACT 109:149335; MARPAT 109:149335		
GI				



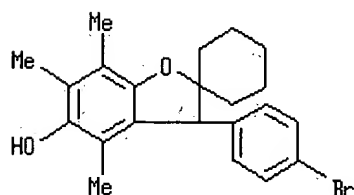
AB The title compds. [I; R = alkyl; R0 = H, acyl; R1-R4 = (un)substituted alkyl; R1R2 = CH:CHCH:CH; R3R4 = polymethylene; R5 = (un)substituted alkyl, aryl, heterocyclyl] were prepd. 4-FC6H4COCHMe2 (prepn. given) was added to 1-bromo-2,5-dimethoxy-3,4,6-trimethylbenzene in THF previously treated with BuLi and the mixt. stirred 1 h to give 92.3% diphenylpropanol II which was refluxed 18 h in 47 wt.% aq. HBr to give 74.8% title compd. III. The latter, at 100 mg/kg orally gave 93% inhibition of the excitatory behavior induced by spinal intrathecal injection of FeCl2 soln. in mice.

IT **116674-27-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as cardiovascular and antiallergic agent)

RN **116674-27-2** HCAPLUS

CN Spiro[benzofuran-2(3H),1'-cyclohexan]-5-ol, 3-(4-bromophenyl)-4,6,7-trimethyl- (9CI) (CA INDEX NAME)



=> file caold

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
11.33	480.76

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
-1.30	-3.25

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> file caold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	481.16
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-3.25

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FILE COVERS 1907-1966  
 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d his

(FILE 'HOME' ENTERED AT 08:20:33 ON 08 SEP 2003)

FILE 'REGISTRY' ENTERED AT 08:20:40 ON 08 SEP 2003

L1 STRUCTURE UPLOADED  
 L2 50 S L1  
 L3 2122 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 08:24:21 ON 08 SEP 2003

L4 629 S L3

FILE 'REGISTRY' ENTERED AT 08:24:49 ON 08 SEP 2003

L5 STRUCTURE UPLOADED  
 L6 3 S L5  
 L7 96 S L5 FULL

FILE 'HCAPLUS' ENTERED AT 08:25:58 ON 08 SEP 2003

L8 5 S L7  
 L9 0 S L8 AND PD OHKAWA, S?/AU  
 L10 3 S L8 AND PD < JULY 1997

FILE 'CAOLD' ENTERED AT 08:26:59 ON 08 SEP 2003

L11 0 S L7

FILE 'REGISTRY' ENTERED AT 08:27:10 ON 08 SEP 2003

L12 STRUCTURE UPLOADED

L13 1 S L12

L14 10 S L12 FULL

FILE 'HCAPLUS' ENTERED AT 08:29:58 ON 08 SEP 2003

L15 4 S L14

L16 2 S L15 AND PD < JULY 1997

FILE 'CAOLD' ENTERED AT 08:30:38 ON 08 SEP 2003

FILE 'CAOLD' ENTERED AT 08:30:43 ON 08 SEP 2003

=> s l14

L17 0 L14

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.40	481.56

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-3.25

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 08:30:53 ON 08 SEP 2003